

Exploring 21st Century Teaching Development Model for Lecturers: A Case Study of Two Universities in Vietnam

Khoa Do

Lecturer, University of Finance-Marketing
Ho Chi Minh City , Vietnam

Maria Socorro (Marrisa) C.L. Fernando Ph.D.

Lecturer and Associate Program Director, MMOD
Graduate School of Business, Assumption University, Thailand

Abstract

The world is changing day by day and education sector is also catching up to provide sufficient education outcomes required by society in 21st century. Teachers is one of key factors contributing to graduate quality. This study aims to explore the influence of soft skills in terms of critical thinking, problem-solving, communication, teamwork, and information management skills on teaching competency of lecturers at two faculties of two universities in Vietnam. The findings of quantitative and qualitative data indicated soft skills in terms of critical thinking, teamwork, and communication skills have influence on the teaching competency of lecturers within two faculties of two universities in this study. More importantly, the qualitative results also provided a deeper understanding of these soft skills on teaching competency of lecturers. Lecturers highlighted the important of communication skills regarding the presentation skills, public speaking, listening skill, problem-solving, and the method to inspire or motivate students to learn. Most lecturers preferred further opportunities to develop professional competency and doing more researches. They desired better working environments which offered more training sessions, workshop, or conference. Lastly, supports from universities or faculties particularly would be an incentive to promote them devote more in teaching path. An action plan was developed basing on the key findings of this study for a purpose to provide a road map so that lecturers can get more crucial 21st century classroom teaching skills. In a long term, it gradually contributes to develop the national competitiveness for its citizen as an education outcome.

Keywords: teaching competency, teaching development, soft skills in teaching, 21st century skills.

Introduction

As the world becomes flat (Friedman, 2007), the technology advancement, global economy changes, job description changes, etc. are key factors for change in education sector in 21st century so that graduates must be well equipped to meet the new demands of

society. As a result, learning 21st century skills require 21st century teaching method (Saavedra and Opfer, 2012).

The population of this study was lecturers of two faculties of two universities in Vietnam. Although the instructivism or the traditional teaching method is still accounting for major teaching approaches, both two universities are trying their best to improve and upgrade the education quality to reach higher outcomes. This study is a fundamental study which contribute as an initial stage for further research to develop the bright outcomes for education sector in Vietnam.

Research Objectives

1. To explore the current soft skills necessary for teaching in the 21st century.
2. To determine the influence of soft skills in terms of critical thinking, problem solving, communication skills, teamwork skill, and information management skills on the teaching competency of lecturers.
3. To propose a teaching development model based on the results from quantitative and qualitative data.

Research questions

1. What are the soft skills necessary for teaching in the 21st century?
2. What is the influence of soft skills in terms of critical thinking, problem solving, communication skills, teamwork skill, and information management skills on teaching competency of lecturers?
3. What is teaching development model can be designed?

Research hypothesis

- H₁₀: There is no significant influence of critical thinking skills on teaching competency of lecturers.
- H_{1a}: There is significant influence of critical thinking skills on teaching competency of lecturers.
- H₂₀: There is no significant influence of problem solving skills on teaching competency of lecturers.
- H_{2a}: There is significant influence of problem solving skills on teaching competency of lecturers.
- H₃₀: There is no significant influence of communication skills on teaching competency of lecturers.
- H_{3a}: There is significant influence of communication skills on teaching competency of lecturers.
- H₄₀: There is no significant influence of teamwork skills on teaching competency of lecturers.

- H_{4a}: There is significant influence of teamwork skills on teaching competency of lecturers.
- H₅₀: There is no significant influence of information management skills on teaching competency of lecturers.
- H_{5a}: There is significant influence of information management skills on teaching competency of lecturers.
-

Review of Literature

Theories of 21st century education

There are several different teaching model theories. The most discussed are two key poles: instructivist and constructivist theory. Sidney (2015) defined “The behaviorist view asserts that learners learn through positive or negative behaviors as well as supporting these behaviors with extrinsic motivators” and “The constructivist view asserts that learning constitutes more of a discovery learning aspect and aims students towards conceptual understanding.”

“The constructivist theory seeks to afford students the freedom to discover their own learning, while the behaviorists’ theory seems to utilize more feedback, stimuli, and reinforcement” (Sidney, 2015). Porcaro (2011) consolidated the instructivism as a teaching method that are “well-formulated, teacher directed, didactic learning” which is contrast to “constructivism’s student-centered forms of instruction”, “including social”, “situated”, “knowledge creating”, and “intersubjective pedagogies”.

Torrance (2012) stated that “More social constructivist approaches see knowledge and understanding as constructed through interaction, rather than transmitted through instruction, placing emphasis on the interaction of teacher and student, student and task, and indeed student and student.”

There are many arguments regarding to constructivism and instructivism. Porcaro (2011) synthesized instructivism was insufficient for students to develop language, problem-solving skills, critical thinking skills, and restrain the students’ engagement in learning. Regarding to constructivism method, Porcaro (2011) described it was more advanced since epistemic practices were carried out by developing the collaboration skills, problem solving skills, empowering students to speak up and these skills are necessary for knowledge society in 21st century. However, the constructivism was fitted to Western students for a reason that non-Western students were familiar with instructivism teaching method (Catterick, 2007). Bereiter (2002) stated several educators criticized instructivism as a stereotype of memorizing information then recalling it, but not focus on developing necessary skills such as problem-solving, collaboration, or creativity. As a result, teachers tend to prefer using the constructivism teaching method in 21st century.

Factors Driving the Movement towards 21st Century Skills

Technology changes and the global market interconnection natures have driven a massive transformation concerning the essential competencies for success in 21st century, as a result, the 21st century competencies – oriented teaching has arisen as an urgent need of key successes for students to prepare in the changing global (Debolah, 2012). The global economy changes, the information revolution era, pivotal demands upon global citizens entail to reform the vital priority on education program to requisite reality in the 21st century (Debolah, 2012). Bellanca and Brandt (2010) stated that these crucial requirements have put more efforts to define the “learning and innovation skills, life and career skills and information, media and technology skills as 21st century skills”. Basing on the survey’s result of college instructors, the findings of Wagner (2008) figured out that almost all students at that college lacked analytical thinking, comprehend complex reading, adequate researching and writing, problem – solving in certain scenarios. The Wagner’s research (2008) defined un-preparing for these competencies have affected students’ successes in the college.

On the other hand, Dede (2005) stated that the job description has been changed dramatically, thanks to technology development. As a result, works have been processed faster, and key functions in business are transformed as well. Debolah (2012) indicated that stakeholders in varieties’ business have been forced by their own urgent needs’ business environment to push development of 21st century competences so that education institutes address these skill sets of 21st century requirement on manpower source.

There are several factors that have pushed the movement on defining the core 21st century skills such as arising descriptions for job in technology era (OECD, 2005); Tasks and works have been re-defined by technology advancement (Dede, 2009, Wagner, 2008). Apparently, headhunters set high standards for job vacancies concerning good reasoning skill, technology savvy to name a few (Wagner, 2008). The world has flattened (Friedman, 2007). To work in a flat world requires to cooperate as well as collaborate with differently cultural colleagues, and individuals must understand, respect their working partners (Johnson and Johnson, 2010, Wagner, 2008)

It is an urgent need to immediately weave new learning into practice in the current changes (Debolah, 2012). Bellanca & Brandt, (2010), Rotherham & Willingham, (2009), and Wagner (2008) depicted that capabilities concerning on critical reasoning, solving problems, and effective skills on communication are the must skills to master regarding to global citizen’s success.

Soft Skills in 21st Century Skills

The Importance of Soft Skills:

The world is changing day by day and the education sector is also followed the rule of constant changes. It has raised concerns on reiterating the education program plans to fit with current circumstances. The recent Plan of National Educational Technology stressed that due to latest changes in every single aspect of the world, we must focus not only on the general courses but also weave and implant the 21st century skills such as critical thinking, complex problem solving, collaboration, and multimedia communication to name a few to the curriculum (US Department of Education, 2010).

Learning and Innovation are the most mentioned skills referring to 21st century skills which are increasingly and widely recognized as perspectives that differentiate students are proactively acquired for ever-increasingly complex life and work environment in the 21st century, and from those who are not.

Studies Related to Independent Variables

It is undeniable that academic courses play a crucial path in education program. Likewise, 21st century interdisciplinary contents such as Global Awareness, Financial, Economic, Business and Entrepreneurial Literacy, Civic Literacy, Environmental Literacy to name a few should be woven into teaching (Partnership for 21st Century Skills, 2009; 21st Century Knowledge and Skills in Educator Preparation, 2010).

Critical thinking skill is considered as the must skill to have that graduates learn (The Pathways Commission, 2012; Hart Research Report, 2015). Many definitions of critical thinking present the ideas of “reasoning, judgment, procedural knowledge, meta-cognition, reflection, questioning and justification” (Wilkin, 2016; Fischer et al., 2000; He et al., 2013). Critical thinking was considered as the capability to analyze and evaluate evidence, arguments, claims and beliefs on given matters (Partnership for 21st Century Skills, 2009; 21st Century Knowledge and Skills in Educator Preparation, 2010). In education sector, the critical reasoning needs more efforts from stakeholders to help students develop this skill (Belkin, 2015; Arum and Roksa, 2011), and critical thinking plays a key role in professional competency (Apostolou et al., 2013; Carmona, 2013; Lehman, 2013). Ngang et al. (2014) proved the critical thinking skills significantly influence the teaching quality Howlett et al. (2016) concluded the up-to-date curricula and well-designed teaching approaches in tertiary level can bring a wave of transformation that develop students’ reflective and critical thinking skills. Fresh graduate teacher had high level of critical thinking skills (Attakorna et al., 2013). Prasertcharoensuk et al. (2014) revealed the influence of teacher on critical thinking skills positively affected students’ life skills and learning achievement. He et al. (2013) found

that to improve the quality co-operative programs of 20 universities in China in areas of curriculum and teaching, stakeholders must focus on developing critical thinking skills.

Problem-solving skills: Problem solving were considered as the capability to solve different kinds of non-familiar problems in both conventional and innovative ways (Partnership for 21st Century Skills, 2009; 21st Century Knowledge and Skills in Educator Preparation, 2010). There were different proposals to address and assess problem-solving skills in education field (Sudheer Reddy and Srinagesh, 2013; Gibbings and Brodie, 2008). Problem-solving skills is a teaching competency influenced the students learning outcomes (Prasertcharoensuk et al. 2014). Greenberg & Nilssen (2014) presented that role of education in building problem solving skills for students must be paid more focuses. Attakorna et al. (2013) revealed young teachers were well-trained in solving problem. Laboratory is a practical teaching method for students to investigate and solve problems (Leite & Dourado, 2013). Since activities in laboratory are provided as a real object compared to theory, students feel engage to solve dilemma (Jonassen, 2004). Furthermore, team-based learning pedagogic approach has been developed (Goltz et al., 2007) to provide practical opportunity for student to engage into learning processes. Hairuzila et al. (2014) found that 84,7% lecturers mentioned the importance of problem solving skills tin teaching. Ngang et al. (2014) pointed out teachers' solving problem ability greatly impacted the teaching process. Hairuzila (2014) described the problem-solving skills was one of crucial skills for engineering students.

Communication skills: Communication articulate thoughts and ideas effectively using oral and written communication skills in a variety of forms and contexts (Partnership for 21st Century Skills, 2009; 21st Century Knowledge and Skills in Educator Preparation, 2010). Many studies highlighted the importance of communication skills (Smith, 2005; Gray, 2010), teamwork skills (Payne, 2005; Porterfield and Forde, 2001), creativity (Dacre Pool and Sewell, 2007), and critical thinking skills (McCleneghan, 2006) in educating students at tertiary level.

Research of Victoria University of Wellington (2015) concluded communication skills and teamwork skills were in top ten attributes that employers were seeking from university graduates. Similarly, the survey of Graduate Careers Australia (2013) listed communication skills first, followed by critical reasoning, motivation and commitment. Clokie and Fourie (2016) suggested higher education institutions need develop communication skills for students since the fresh graduates' written skills on job application showed to employer which can determine how graduates make first impressions on employers (Graham, Hampton, and Willett, 2010).

Kanokorna et al. (2013) proved that after completing soft skills training development, most teachers considerably improved the communication and presentation skills. Similar study of Ngang et al. (2014) found teachers perceived communication skills as important, but there were a insufficient teacher training development compared to real teaching places. Research findings of Attakorna et al. (2013) showed recently

educated teachers had good communication skills. More noticeably, key findings from research of Hairuzila et al. (2014) illustrated 100% lecturers emphasized on the role of communication skills on teaching competency. Similar research of Hairuzila (2014) figured out that engineering students were well-developed by integrating communication skills in teach engineering courses.

Teamwork skills: Compromise, responsibility sharing, flexibility and working effectiveness with a diverse and differently cultural team members were defined as the collaboration (Partnership for 21st Century Skills, 2009). To collaborate successfully and appropriately, communication is a proper channel to access and reach good solutions (OECD, 2005). Collaboration demonstrate ability to work effectively and respectfully with diverse teams (Partnership for 21st Century Skills, 2009; 21st Century Knowledge and Skills in Educator Preparation, 2010). Since teamwork and problem-solving skills are key competencies, problem-based and team-based learning teaching approaches have been developed (Goltz et al., 2007). The up-to-date curricular and different pedagogic practices were implemented accordingly aiming to equip graduates with teamwork and problem-solving skills (Axley & McMahon, 2006). Ngang et al. (2014) discovered novice teachers considered teamwork skills as important in teaching task and desired to embed teamwork training into teaching development. Ngang et al. (2014) also proved the important relation teamwork skills of teachers on teaching. Similarly, Attakorna et al. (2013) found novice teachers had good teamwork level. Greenberg & Nilssen (2014) presented collaboration within teachers should be more focused to improve the teaching quality.

The Association of American Colleges and Universities (2002) proposed to pay more attention on develop crucial competencies such as communication skills, teamwork, and problem-solving skills. Despite educators put efforts into matters, teaching outcomes seemed to be inappropriate matching – since fresh recruits were complained unable to solve given problems at workplace (Holt & Willard-Holt, 2000).

Information management skills: Conceicao (2013) defined information management skills as the capability “collect and manage information from one or more sources”, which can be in the forms of printed, electronic, audio, video, graphics format ... The documents can be stored and distributed by using various devices such as mobile phones, flash drivers, portable hard disk drivers, tablets, and websites (Conceicao, 2013). Young male teachers highly preferred to apply Information Communication Technology into teaching tasks (Al-Bataineh, (2013) The ability to practice the information management skills relate to the way lecturers organize, control, process, evaluate, and report information so that teaching related documents can be processed more effectively and efficiently (Conceicao, 2013). Adnan et al. (2014) pointed out that information management skills are acquired, and practical task needed to be taught at tertiary level.

Studies Related to Teaching Competency

OECD (2009) made clear the difference between teaching competency and lecturer competency. The teaching competency concerns about the lecturer's role in the classroom, in which lecturers' knowledge and skills are utilized to convey and transfer lesson to students (Hagger and McIntyre, 2006). Meanwhile, lecturer competency covers a broad meaning of lecturer professional relating to individual, university, community, and teaching-related networks (OECD, 2009).

The European Commission (2013) highlighted the need to focus on developing transversal or soft skill including thinking critically, taking initiatives, solving problems, and working collaboratively. European Commission (2013) defined an outstanding teacher is person who has ability to enhance skills and learning outcomes as following:

- “complex thinking – problem solving, reciprocal learning, experiential learning;
- social skills and participatory learning – interaction with tutors and other learners, active participation in learning, interdependence; and
- personal shaping of knowledge – progressive mastery, individual pacing, self-correction, critical reflection, active seeking of meaning, empowered self-direction, internal drive/motivation" (European Commission, 2013)

Along with teaching process, teachers are recommended to organize extra-curricular activities such as leisure activities, camping, volunteering ... Through these approaches, teachers can foster the teaching efficiency in a practical manner. Alfen et al. (2007) highlighted the four key crucial attributes in developing lecturer competency at tertiary institutions as below:

1. Building cognitive knowledge base;
2. Fostering teaching skills;
3. Enhancing lecturer's research competence;
4. And shifting from teaching theory to practice

According to Nguyen (2009), teaching competency is one of three key competencies that lecturers in higher tertiary must master. The other two are professional competence and research competence. The intersection of three key competencies is the job requirements for lecturers in university.

Nguyen (2009) depicted that professional competence is the capability to keep trace of up-to-date developments in terms of both academic and practice. Nguyen (2009) described the research competence is the capability to conduct in-depth research that relates to lecturers' expertise.

Le & Pham (2016) has synthesized lecturer's teaching competency including seven points as following:

1. “Professional competence and broad understanding;

2. Competence on understanding students during teaching process;
3. Competence on lesson composing;
4. Teaching organizing competence;
5. Evaluating and criticizing competence;
6. Competence for communicating and negotiating and making decision;
7. And competence for learning and self-developing.” (Le & Pham, 2016)

“Teachers play the decisive role in ensuring the quality of education” (Vietnam Education Law: 2005). The key success factors influence the teaching and training outcomes is the teaching competence of lecturers (Le & Pham, 2016).

Hagmann et al. (2003) implied that educators had implemented new teaching approaches by weaving soft skills into curricula which both benefited teaching competency of teachers and learning outcomes of students. Meanwhile, Subramaniam (2013) found that perceptions of teachers understood the role of soft skills but teaching competency lacked readiness and specific practices to integrate soft skills in teaching and learning processes. However, research findings of Hassan et al. (2014) presented that majority of lecturers strongly agreed to embed soft skills into education programs at tertiary level. More importantly, their teaching competencies showed that 75% lecturers considered embedding soft skills into teaching was not burdensome to implement. This illustrated a high level of teaching competency of lecturers in the research. Affandi et al. (2012) found a gap between soft skill perceptions of lecturers and students in soft skills implementation in construction management program. Teaching soft skills to business students required practical activities (Anthony and Garner, (2016). “Guess speaker” was highly acknowledged by students as an effective pedagogic method in which students can both learn soft skills and experience of the speaker (Anthony and Garner, (2016). On the other hand, Taylor (2016) revealed stakeholders including businessman, lecturer, and student that students’ soft skills were not developed adequately and teaching soft skills was seen as a tough goal. Teaching competency of lecturers was at a moderate level, since Saavedra & Opfer (2012) stated that “learning 21st century skills requires 21st teaching “. As a result, Xu and Ye (2014) discovered a significant correlation of teaching competency of lecturers with job performance at university. It indicated the teacher’s competency impacted on teaching ability and research competency (Xu and Ye, 2014).

Theory applied to develop interview guidelines: Appreciative Inquiry

Appreciative Inquiry was developed aiming to shift attention from weakness – based approach to strength based or “possibility thinking” manner (Heinz, 2009). The new approach benefits people by concentrating on the exploration what people can do best so that “deficit thinking” (Heinz, 2009) could be made irrelevant. Stavros and Cole (2013) have highlighted the benefits of Appreciative Inquiry approach in comparison with problem solving method.

Appreciative Inquiry in Education

Rubin et al., (2011) described that teachers enjoyed, and students were interested in learning since teachers and students were encouraged to be possibility thinking in studying and teaching. In the higher education level, Cockell et al. (2012) linked the psychology and strength – based approach and found that Appreciative Inquiry influenced education outcome in the first decade of twenty first century. He - Ye (2013) described that teachers reflected, and their competence was enhanced since Appreciative Inquiry was applied. Ruhlman (2014) revealed that Appreciative Inquiry provided time and space for positive conversation in education process so that both teachers and students embraced organizational learning and reach collaboration through AI implementation.

In this study, the Appreciative Inquiry approach is used to develop the interview guidelines to gain deep understanding on the soft skills and teaching competency.

Conceptual framework

The conceptual framework of the study is based on the key skills for success indicating by above theories: Critical Thinking and Problem Solving, Communication, Teamwork, and Information Management Skills. Since Vietnam tertiary education are on the initial stages of shifting from traditional teaching method into new teaching approaches, these fundamental items were chosen to conduct this study for the reasons that they were related closely to the current situation within two universities in Vietnam. The 21st century competency is a broad topic. This paper explored a narrow scale of these skills.

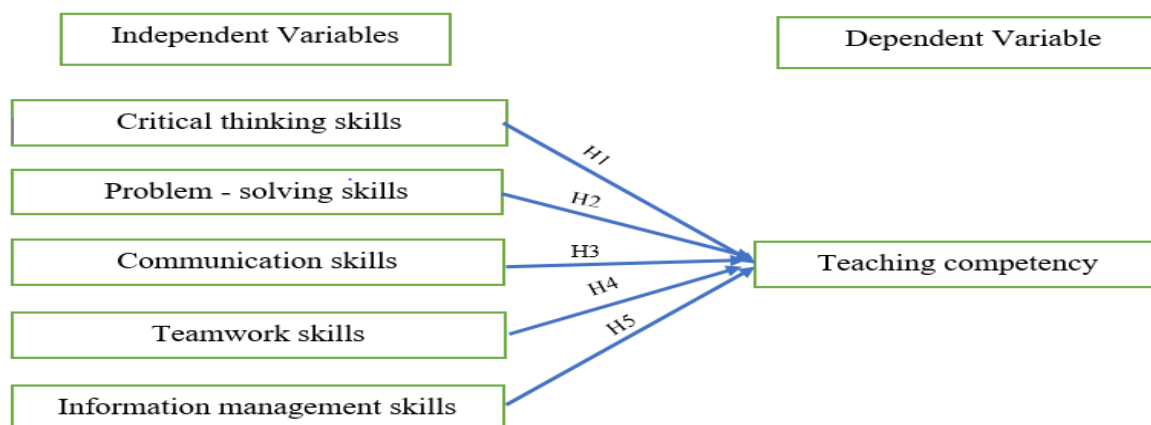


Figure 1 Conceptual framework

Source: Developed by researcher

In the conceptual framework, researcher explored the 21st teaching competency in senses of soft skills, regarding key attributes namely critical thinking and problem solving, communication, teamwork skills, and information management skills. These are the essential skills which is considers as requisite requirement for 21st century education in general and higher institutions particularly.

The independent variables comprised of critical thinking skills, problem-solving skills, communication skills, teamwork skills, and information management skills. And the dependent variable is teaching competency.

Both quantitative and qualitative results were used to build the teaching development model for two universities.

Research Method

The mixed method was used in this study. The questionnaire was distributed online to 132 participants and sent the off-line versions to 12 participants. Moreover, the interview guidelines were designed based on the Appreciative Inquiry to conduct the interviews with ten lecturers. The target population of this study was lecturers of two faculties, Business Management Faculty and Foreign Language Faculty in two universities in Vietnam.

The quantitative data was processed by using the statistical analysis program to gain descriptive statistics and inferential statistics using multi linear regression. The qualitative data was analyzed by using inter-coding method.

Results and Discussion

This part comprised of quantitative data analyzing and qualitative data interpreting of the research. Data comprised of 144 respondents for quantitative and 10 interviewees for qualitative data.

Quantitative results

The researcher used the statistical analysis program to calculate the data collected from the survey. Multiple linear regression was applied to process quantitative data.

Table 1.

R-Square Results

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.793 ^a	.629	.616	.39775	.629	46.830	5	138	.000
a. Predictors: (Constant), IMS, CTS, CS, PSS, TWS									

Table 1 showed the score of R-Square = 61.6% of the change in Dependent Variable – Teaching Competency is due to the Independent Variables which comprise of communication, problem solving, critical thinking, teamwork, and information management skills.

Table 2.

Multiple Linear Regression Result

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Description	
		B	Std. Error	Beta			Beta value ranking	
1	Constant	.238	.289		.822	.413	Not significant	
	CTS	.304	.088	.275	3.438	.001	1 st	Significant
	PSS	.152	.103	.137	1.484	.140	Not significant	
	CS	.229	.094	.214	2.441	.016	3 rd	Significant
	TWS	.246	.103	.229	2.394	.018	2 nd	Significant
	IMS	.083	.090	.076	.920	.359	Not significant	
a. Dependent Variable: TC								

Table 2 illustrates that there were three items ““CTS” – critical thinking skills, “CS” – Communication Skills, and “TWS” – Teamwork Skills had the scores at $p = .001$, $p = 0.016$, and $p = 0.018$, respectively, which were $< .05$ meant that “CTS”, “CS”, and “TWS” were at significant levels.

Qualitative results

The Inter-coding method was used to summarize interviewing results. Three separate persons, comprising of two graduate students and a Ph.D. student, come up with three independent codes basing on the perceptions of interviewees. Researchers consequently took the common codes regarding to works' three inter-coders.

Question 1 Summary:

Giving opinions on the question "What are your best skills concerning on the soft skills that you used / applied into teaching at tertiary level?", three coders presented that participants mentioned about their teaching strengths regarding to presentation skills in teaching, communication skills, problem solving skills, group working and public speaking skills

Question 2 summary:

Perceptions on the question "In your opinions, what are the most important soft skills that are vital for teaching competency?", table 37 shows that lecturers thought communication skills, motivation, collaboration, listening skills, group work, and problem-solving skills were considered vital for teaching competency.

Question 3 summary:

Results on the question "In your views, what are two or three key success factors for lecturers in 21st century (soft skills in teaching, research competency, professional competency...)" on table 38 presents that professional competency development – further studying, soft skills in teaching, communication skills, oral presentation skills, collaboration, research competency development, and motivation were crucial contributing on key success factors for lecturers in 21st century.

Question 4 summary:

Regarding to question "What are your suggestions to apply / develop these factors for lecturers in next 2 coming years? table 39 describes that lecturers engaged on further studying and self-study, joining or organizing local / international workshops / conferences, spending time on professional competency development, attending training sessions, collaborating with colleagues, learning from others, developing research competency, applying Information Communication Technology into teaching, teamworking, and getting supports from university.

Discussion

The findings of qualitative and quantitative both re-affirmed that the critical thinking skill has significant role in teaching processes (Attakorna et al., 2013; Adnan et al., 2014; Hairuzila et al., 2014; and Hairuzila, 2014). Lecturers paid most focuses on figuring stakeholders' viewpoint, looking into matters by seeking relevant evidences, and language that colleagues or students using in communication. The results implied that lecturers of two universities studied the root causes of teaching matters by logically reasoning. The findings confirmed that critical thinking skills influenced teaching process (Ngang et al., 2014). However, due to the traditional teaching method, critical thinking skills still in theory and not much in teaching practices. As a result, further contributions to build critical thinking skill at tertiary level need to be called for. (Belkin, 2015; Arum and Roksa, 2011).

In addition, quantitative findings of the study showed teamwork skills gained statistically significant level regarding to influence on teaching competency (Goltz et al., 2007; Axley & McMahon, 2006; Attakorna et al., 2013; Hairuzila et al., Greenberg & Nilssen, 2014; and Ngang et al., 2014) and qualitative findings presented most interviewees noticeably raised the importance of teamwork in teaching. The target lecturers have sensed on teaching spirit of collaboration with colleagues to gain better teaching approach. It was illustrated by research of Ngang et al. (2014) as teachers raised the importance of teamwork. Teamwork was articulated as lecturers collaborate in their faculties to teach more effectively. The instructivism or traditional teaching method retrained the development of collaboration skills of students in two universities. Since teamwork is one of key competencies, team-based learning has been developed to develop teamwork (Goltz et al., 2007). The ideas to offer company-based learning, promote students' participant in teamwork-based assignments, and to shift from theory learning to practical collaboration are somehow quite new to apply at big scale since instructivism is still mainly used in tertiary level.

Furthermore, statistic results described communication skills have influenced on teaching (Attakorna et al., 2013; Ngang et al., 2014; Attakorna et al., 2013; Shahid et al., 2014; Yunnus et al., 2014; Hairuzila et al., 2014; Yao, 2015, and Hairuzila, 2014) and qualitative data findings presented detail and smaller scales of communication skills in teaching including oral presentation skills, public speaking, and listening skills. This implied that teaching process requires using tailored-language to certain background level of student. Moreover, lecturers used communication as a channel to collaborate with colleagues. As a result, lessons were customized-design and tailor-presented to given group of students. Communication skills also listed in top ten requisite skills (Research of Victoria University of Wellington, 2015; Clokie and Fourie. 2016). There was an insufficient level among soft skills gained from school and real workplace demands (Ngang et al., 2014). However, communication skills can be developed through project-based teaching or laboratory-based method (Hairuzila, 2014). Since communication skills

was thoroughly emphasized as a key role on teaching competency (Hairuzila, 2014), lecturers argued that communication was the best channel to convey and exchange lesson and information with students. Whenever teaching in class, communication skill should be put in a well-framed design so that lecturers can radically transfer the lesson to students.

Besides the common themes of both quantitative and qualitative findings, the interview results provided a deeper insight regarding the soft skills in teaching and teaching competency. The most remarkable theme was most interviewees discussed about professional development. This implied that lecturers intended to broaden their expertise which they can gain higher professional competency by doing further research. Consequently, teaching competency will be developed simultaneously as teaching competency is the combination among lecturer competency, research competency, and professional competency (Nguyen, 2009). Albeit without gaining any significantly statistic results from quantitative findings, lecturers sensed problem-solving skills as important soft skills in teaching. They implied that the more they were good at problem-solving skills, the better they could handle problems or troubleshoot issues arising in classroom which were out of the lesson plans. Another considerable finding was motivation skills. Lecturers considered motivation as a skill which implied the approach and the manner lecturer used to incentive or inspire students in learning. Information Communication Technology was found from the results of interviews. Most lecturers apply technology in compiling lessons. This indicated that they utilized the technology as a tool and channel to convey lessons and communicate to students. Sharing the coming plans to enhance and improve their knowledge and competency, almost all of them said that they would spend much time and efforts for higher studying or professional competency. The focus was to self-study including doing research. They hoped to have more chances organizing /participating into workshop or training sessions where they can share, learn, and collaborate. In 21st century, Information Communication Technology played an important role in designing lessons. Interestingly, several respondents shared that universities should strongly support and map out detail plan in terms of developing professional competency and soft skills so that they could devote their will and efforts better.

Conclusion

The research was conducted with target lecturers of two universities in Vietnam. The key purpose of researcher was to explore the influence of soft skills in terms of critical thinking skills, problem solving skills, communication skills, teamwork skills, and information management skills on teaching competency at tertiary level. There were total 144 participants participated on the questionnaire and 10 lecturers accepted to be interviewed.

The target population was both part-time and full-time lecturers who were teaching at two universities in Vietnam. Their education range was from “B.A. degree” to “higher than Ph.D. degree” whose age was from “22 – 35” to “43 – 55” years old. Majority of participants were female, which represented 59.7 % of total respondents. And most of respondents were working at faculty of “Business Management”, accounting for 56.3%, compared to 43.7% of “Foreign Languages”.

The multi-linear regression was conducted to identify the hypothesized. The results from quantitative data presented that there were considerable influences of both critical thinking skills, communication skills and teamwork skills on teaching competency of lecturers at two universities in Vietnam. The interviewing results described that lecturers were good at communication skills and presentation skills since they considered the most important skills in teaching at tertiary level were communication skills and presentation skills. They listed professional competency and soft skill in teaching are key success factor for 21st century lecturers. Working in team was one of crucial skills that lecturers described as it helped them to discuss and give ideas in handling teaching related issues. Besides, they raised the important method how to motivate students learn better. Almost all of lecturers intentionally plan for further studying, self-studying, and participating on workshops to gradually enhance and upgrade their own skills and competencies.

Limitation

There were several limitations that affected the research processes. First and foremost, the target population of research was conducted within a part of lecturers from both two universities. The result was in small scale, including Foreign Languages Faculty and Business Management Faculty, in comparison with the whole population of two universities. In addition, time was also another obstacle. The researcher had a little time to contact and meet lecturers to conduct interviews, due to locations of two universities are in distance. Lastly, due to year-end overloaded works, several senior lecturers who have great experiences could not join and share deep insights to the research.

Teaching Development Model for 21st Century Teaching for Lecturers of Two Universities in Vietnam

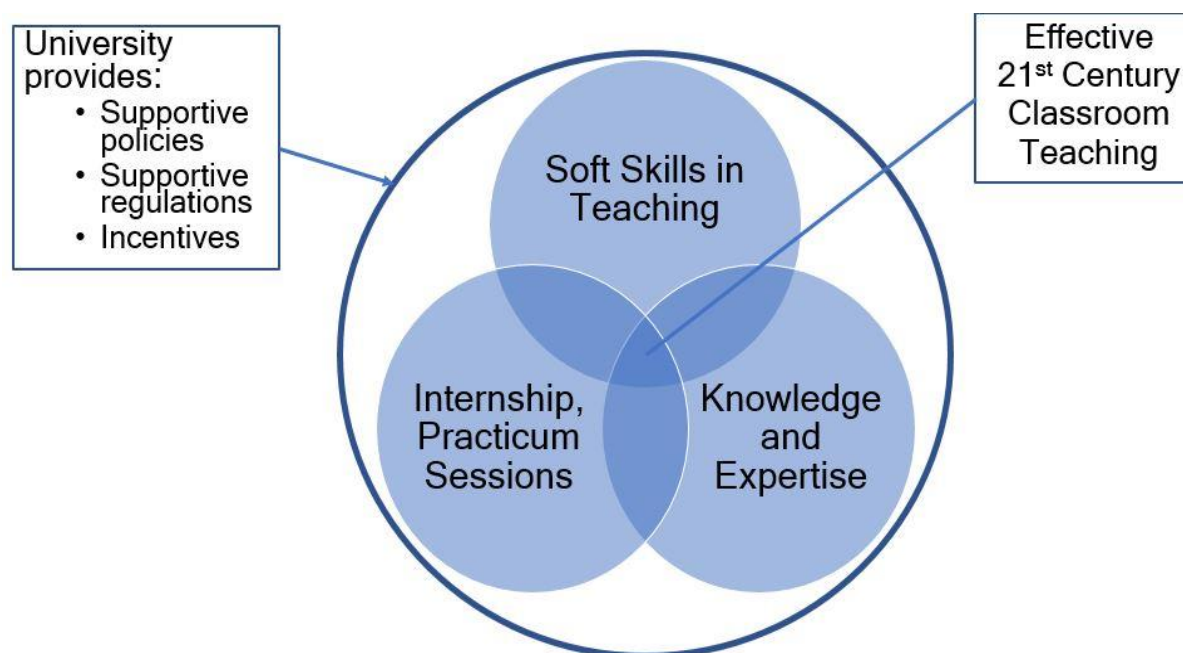


Figure 2 . Teaching Development Model: The Effective 21st Century Classroom Teaching

Source: Developed by researcher

Figure 2 is the teaching development model that developed based on the key findings from both quantitative and qualitative results of this study. Basically, this study focused on the impacts of soft skills on teaching competency and key findings proved these impacts existed. However, the qualitative results provided a deeper and broader understanding in which the interviewees emphasized the surrounding matters both restrain and enhance their teaching competency.

The tailored-model for two universities in this research includes three key attributes:

- Soft Skills in Teaching resulted from both quantitative and qualitative findings;
- Knowledge & Expertise derived from the qualitative findings;
- And Internship / Practicum Sessions come from qualitative findings.

Another perspective is the supports of universities stemmed from qualitative results. This attribute has no direct relation to the teaching. However, it can somehow indirectly influence the teaching development of lecturers.

The three separate circles are interconnected that make the teaching development model. The first circle is Soft Skills in Teaching Critical, comprises critical thinking, teamwork, communication, problem solving, public speaking, motivation, listening, and presentation. The second one is Knowledge & Expertise where lecturers pay attention to develop their own expertise by further studying – professional competency and research competency. The third part is Internship / Practical Sessions where lecturers can learn and share experiences together. It can be training sessions, seminars, workshops, or conference which benefit educator in updating and addressing new teaching-related matters. The big outside circle that implies the supports of universities. Lecturers desired to get more favorable supports from university so that they can allocate time and effort in develop themselves and devote for education works better.

The Proposed Action Plan

Basing the Teaching Development Model: The 21st Century Effective Classroom Teaching, the action plan is about to map out the short and long-term plan for the model.

Table 3.

Proposed Action plan for the Teaching Development Model

Area	Objectives per areas	Key Contents	Key Activities /Performances	Timeline	Resources
Soft Skills in Teaching	<ul style="list-style-type: none"> Lecturers gain fundamental and practical activities of soft skills that can be applied into classroom: <ul style="list-style-type: none"> Critical thinking, Teamwork, Two-way communication, Problem-solving, Public speaking, Motivation, And presentation skills 	<ul style="list-style-type: none"> Soft Skills in Teaching 	<ul style="list-style-type: none"> Instructional Development Integration/ Internships / Practicum sessions/ Workshops / Seminars/ Training Sessions etc. focus on: <ul style="list-style-type: none"> Critical thinking, Teamwork, Two-way communication, Problem-solving, Public speaking, Motivation, And presentation skills 	<ul style="list-style-type: none"> to be determined by the university 	<ul style="list-style-type: none"> to be determined by the university
Knowledge and Expertise	<ul style="list-style-type: none"> Developing the professional competency of lecturers in terms of: <ul style="list-style-type: none"> Knowledge Expertise Capture latest developments in lecturers' expertise regularly and promptly. 	<ul style="list-style-type: none"> Knowledge Expertise 	<ul style="list-style-type: none"> Further study / Learn from others' experiences: <ul style="list-style-type: none"> Doing doctorates Doing further researches Bring the results of researches into practical activities. 	<ul style="list-style-type: none"> to be determined by the university 	<ul style="list-style-type: none"> to be determined by the university
Internship and Practicum Sessions	<ul style="list-style-type: none"> Long -term and holistic-oriented development Developing well-trained lecturers those who are well equipped with requisite skills in 21st effective classroom teaching 	<ul style="list-style-type: none"> Soft Skills in Teaching Knowledge Expertise 	<ul style="list-style-type: none"> Embedding soft skills into teaching development program which is about to educate and train next coming generations of teachers Promote more candidates to study masters and do doctorates. Universities offers favorable paths, policies to support lecturers study higher, do more researches. Organize conferences/ workshops, send candidates to join international conferences. 	<ul style="list-style-type: none"> to be determined by the university 	<ul style="list-style-type: none"> to be determined by the university

Recommendation

First and foremost, the research was a fundamental for further research in future. Therefore, key findings can be used in the coming studies for Vietnam education which focus in related topics in terms of student perspectives and other stakeholders those who contribute to the education outcomes. More importantly, the outlooks for social development in terms of national development or national competitiveness are about greatly influenced by the education efforts. Secondly, two universities are recommended to organize seminars and workshops relating to soft skills in terms of communication skills, critical thinking, teamwork skills, and presentation skills so that lecturers have a common place to share and learn experiences from others. Thirdly, basing on the finding, researcher recommends two universities to design an Instructional Development Intervention to address soft skills and its influences on teaching competency so that all lecturers at two universities should have prepared in delivering new skills in classroom. Lastly, for a long-term development, researcher hope that teaching development model can attract more attentions on integrating soft skills into teaching development so that graduate teacher can be well-equipped. As a result, education can gain better outcomes to serve, develop, and raise the national competitiveness level for Vietnam.

References

- Axley, S. R., & McMahon, T. (2006). *Complexity: A frontier for management education*. Journal of Management Education, 30(2), 295-315.
- Association of American Colleges and Universities. (2002). *Greater expectations*. Retrieved October 1, 2006, from <http://www.greaterexpectations.org>
- Al-Bataineh, Mohammad T., (2013). Jordanian social studies teachers' attitudes and their perceptions of competency needed for implementing technology in their classrooms. ProQuest Dissertations Publishing, 2013. 3593353.
- Affandi, H.M., Hassan, F., Ismail, Z., and Kamal, M.F.M., (2012). *Soft skills implementation in construction management program: A comparative study of lecturers and students perspective*. : Humanities, Science and Engineering (CHUSER), 2012. Doi: 10.1109/CHUSER.2012.6504374

- Anthony, S., and Garner, B., (2016). Teaching Soft Skills to Business Students *An Analysis of Multiple Pedagogical Methods*. Sage Journal, Vol. 79, Iss. 3, pages 360 -370. Doi: <https://doi.org/10.1177/2329490616642247>
- Adnan, A. H. M.; Ramalingamb, S.; Ilias, N.; and Tahir, T. M. (2014) *Acquiring and Practicing Soft Skills: A Survey of Technical - Technological Undergraduates at a Malaysian Tertiary Institution*. Procedia - Social and Behavioral Sciences 123 (2014) 82 – 89. Retrieved from https://ac.els-cdn.com/S1877042814014384/1-s2.0-S1877042814014384-main.pdf?_tid=9aaee47a-ba59-11e7-9005-00000aacb361&acdnat=1509028146_18ab3baa1183234efc10f91b34eb83a3
- Arum, R. and Roksa, J. (2011). *Academically Adrift: Limited Learning on College Campuses*. University of Chicago Press, Chicago, IL.
- Apostolou, B., Dorminey, J.W., Hassell, J.M. and Watson, S.F. (2013). *Accounting education literature review (2010-2012)*. Journal of Accounting Education, Vol. 31 No. 2, pp. 107-161
- Attakorna, K. et al, (2013). *Soft Skills of New Teachers in the Secondary Schools of Khon Kaen Secondary Educational Service Area 25, Thailand*. International Conference on Education & Educational Psychology - 2013 Retrieved from ScienceDirect at https://ac.els-cdn.com/S1877042814012798/1-s2.0-S1877042814012798-main.pdf?_tid=8190a0f6-ba58-11e7-864b-00000aacb35e&acdnat=1509027675_a6a2a18375280f114b2b552a09eb830e
- Belkin, D. (2015). *Test finds college graduates lack skills for white-collar jobs*. The Wall Street Journal, January 16, available at: www.wsj.com/articles/test-finds-many-students-ill-prepared-to-enterwork-force-1421432744 (accessed April 26, 2015).
- Bereiter, C. (2002). *Education and Mind in the Knowledge Age*. Lawrence Erlbaum Associates, Mahwah, NJ.
- Bellanca, James A., and Brandt, Ronald S. (2010). *21st century skills: rethinking how students learn*. Bloomington, IN: Solution Tree Press, 2010.

- Catterick, D. (2007). *Do the philosophical foundations of online learning disadvantage non-Western students?* in Edmundson, A. (Ed.), *Globalized E-learning Cultural Challenges*, Information Science Publishing, Hershey, PA, pp. 116-29.
- Conceicao, S. C. O. (2013). *Skills Needed to Survive and Thrive as a Scholar in 21st Century*. Retrieved from <https://doi.org/10.1177/1045159513499552>
- Carmona, S. (2013). *Accounting curriculum reform? The devil is in the detail*. *Critical Perspectives on Accounting*, Vol. 24 No. 2, pp. 113-119
- Clokie, T. L. and Fourie, E. (2016). *Graduate Employability and Communication Competence: Are Undergraduates Taught Relevant Skills?* *Sage Journal*, Vol 79 -Issue 4, pages 442 -463. <https://doi.org/10.1177/2329490616657635>
- Cockell et al., (2012), *Appreciative Inquiry in Higher Education: A Transformative Force*. Jossey-Bass Publisher
- Debolah L. Ellis, (2012). *A New Generation: A New Model of Education in 21st Century*. University of Southern California, ProQuest Dissertations Publishing, 2012. 3514160.
- Dede, C. (2005). *Planning for Neomillennial Learning Styles: Implications for Investments in Technology and Faculty*. Retrived from <https://www.educause.edu/research-and-publications/books/educating-net-generation/planning-neomillennial-learning-styles-Dede, 2010>
- Dede, C., (2009). *Determining, developing, and assessing the skills of North Carolina's future-ready students*. Friday Institute White Paper Series, Number 2 (May). www.fi.ncsu.edu/whitepapers
- Dede, C. (2009). *Technologies that facilitate generating knowledge and possibly wisdom: A response to "Web 2.0 and classroom research."* *Educational Researcher* 38(4), 60-63.

- Fischer, S.C., Spiker, V.A. and Riedel, S.L. (2000). *Application of a theory of critical thinking to army command and control*. US Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.
- Friedman, Thomas L. (2007). *The world is flat: a brief history of the twenty-first century*. New York: Farrar, Straus and Giroux, 2007.
- Goltz, S. M., Hietapelto, A. B., Reinsch R. W., and Tyrell S. K. (2007). *Teaching Teamwork and Problem Solving Concurrently*. Journal of Management Education, Vol 32 – pages 541-562. Retrieved from <http://journals.sagepub.com/doi/pdf/10.1177/1052562907310739>
- Gray, F. E. (2010). *Specific oral communication skills desired in new accountancy graduates*. Business Communication Quarterly, 73, 40-67.
- Gibbins, P., Brodie, L., (2008). *Assessment strategy for an engineering problem solving course*. Int. J. Eng. Educ. 24 (1), 153e161. <Go to ISI>:// 000253225600021
- Greenberg, A. D. & Nilssen, A. H. (2014). *The Role of Education in Building Soft Skills: Putting into Perspective the Priorities and Opportunities for Teaching Collaboration and Other Soft Skills in Education*. Wainhouse Research, Whitepaper – 2014.
- Graduate Careers Australia. (2013). *Graduate outlook 2012. The report of the graduate outlook survey: Employers' perspectives on graduate recruitment*. Retrieved from http://www.graduatecareers.com.au/wp-content/uploads/2011/12/GOS12_Report_FINAL1.pdf
- Graham, A., Hampton, M., & Willett, C. (2010). *What not to write: An intervention in written communication skills for accounting students*. International Journal of Management Education, 8(2), 67-74
- Hart Research Associates, (2015). *Falling short? College learning and career success*. Hart Research Associates, New York, NY. Retrieved from www.aacu.org/sites/default/files/files/LEAP/2015employerstudentsurvey.pdf

- He, H., Craig, R. and Wen, J. (2013). *Developing critical thinking skills and effective co-operative international accounting degree programs in China*. Asian Review of Accounting, Vol. 21 No. 2, pp. 144-159
- Holt, D. G., & Willard-Holt, C. (2000). *Let's get real: Students solving authentic corporate problems*. Phi Kappa Deltan, 82, 243-246.
- Hairuzila, I. et al. (2014). Integrating Soft Skills in the Teaching of Hard Sciences at Private University: A Preliminary Study. *Pertanika J. Soc.Sci. Hum.* 22 (S): 17 – 32 (2014).
- Howlett, C., Ferreira, J., & Blomfield, J. (2016). *Teaching sustainable development in higher education: building critical, reflective thinkers through an interdisciplinary approach*. International Journal of Sustainability in Higher Education, vol. 17, issue 3, pp. 305-321. DOI: <https://doi.org/10.1108/IJSHE-07-2014-0102>
- Hagmann, J., and Almekinders, C., et al. (2003). *Developing 'soft skills' in higher education*. Retrieved from <http://pubs.iied.org/pdfs/G02062.pdf>
- Hassan, A., Maharoff M., and Abiddin N.Z., (2014). The Readiness of Lecturers in Embedding Soft Skills in the Bachelor's Degree Program in Malaysia's Teachers Education Institute. *Arts Social Sci J* 2014, 5:2. <http://dx.doi.org/10.4172/2151-6200.1000071>
- Heinz L., (2009). *Developing an Appreciative Eye*. Retrieved from <http://www.thecareguys.com/2009/12/05/developing-an-appreciative-eye/>
- Hagger, H., & McIntyre, D. (2006). *Learning teaching from lecturers. Realizing the potential of school-based lecturer education*. Maidenhead: Open University Press.
- He Ye,,(2013). *Developing Teachers' Cultural Competence: Application of Appreciative Inquiry*. ESL Teacher Education. Taylor & Francis Ltd Publisher
- Johnson, D. W., & Johnson, R. T. (2010). *Cooperative learning and conflict resolution: Essential 21st Century Skills*. In J. Bellanca, & R. Brandt (Eds.), *21st Century Skills: Rethinking how students learn* (pp. 201-219). Bloomington, IN: Solution Tree Press
- Jonassen, E. (2004). *Learning to solve problems: an instructional design guide*. San Francisco: Pfeiffer

- Le, D.T., and Pham, C.H., (2016). Lecturer's Working Environment and Teaching Competence in Selected Agricultural Colleges in Vietnam. *International Journal of Financial Research* – Vol. 7, No. 5; 2016. DOI: <http://dx.doi.org/10.5430/ijfr.v7n5p56>
- Lehman, C.R. (2013). *Knowing the unknowable and contested terrains in accounting*. *Critical Perspectives on Accounting*, Vol. 24 No. 2, pp. 136-144.
- Leite, L., and Dourado, L., (2013). *Laboratory activities, science education and problem-solving skills*. *Procedia – Social and Behavioral Science* 106 (2013) 1677 – 1686. DOI: <https://doi.org/10.1016/j.sbspro.2013.12.190>
- McCleneghan, J. S. (2006). *PR executives rank 11 communication skills*. *Public Relations Quarterly*, 51(4), 42-46.
- Ngang, T.K. et al., (2014). *Soft Skills Integration in Teaching Professional Training: Novice Teachers' Perspectives*. 5th World Conference on Learning, Teaching and Educational Leadership, WCLTA 2014, *Procedia - Social and Behavioral Sciences* 186 (2015) 835 – 840.
- Nguyen, H. L., (2009). *Competence development for lecturers to improve the quality of education and training in universities and colleges in the conditions of globalization and information explosion*. Centre for Research & Development Management - HCM City University of Economics.
- Neal Van Alfen, J. Scott Angle, H. Ray Gamble, Andrew G. Hashimoto, Jaw-Kai Wang, Lynne McNamara, & Nguyen Thi Thanh Phuong. (2007). *Observations on the current state of education in the sector of Agricultural Sciences in Vietnam*. Report of Survey Regiment of the National Academy of the United States presented to the Vietnam Education Foundation.
- Kanokorna, S. et al. (2013). *Soft Skills Development to Enhance Teachers' Competencies in Primary Schools*. *International Conference on Education & Educational Psychology 2013 (ICEEPSY 2013)* - *Procedia - Social and Behavioral Sciences* 112 (2014) 842 – 846. Retrieved from ScienceDirect at <https://ac.els-cdn.com/S1877042814012579/1->

[s2.0-S1877042814012579-main.pdf?_tid=a4e58468-b9f9-11e7-ba6f-00000aacb35d&acdnat=1508986932_5a2c90237792e0b88659701e522e6cb4](https://www.oecd.org/dataoecd/20/00/00000aacb35d&acdnat=1508986932_5a2c90237792e0b88659701e522e6cb4s2.0-S1877042814012579-main.pdf?_tid=a4e58468-b9f9-11e7-ba6f-00000aacb35d&acdnat=1508986932_5a2c90237792e0b88659701e522e6cb4)

OECD, (2005). Education at a Glance 2005. Retrieved from www.oecd.org/education

OECD (2009), "21st Century Skills and Competences for New Millennium Learners in OECD Countries", *OECD Education Working Papers*, No. 41, OECD publishing, © OECD. doi:10.1787/218525261154

Partnership for 21st Century Skills, (2009). *Framework of Partnership for 21st Century Skills*. Retrieved from www.P21.org/Framework

Porcaro, D. (2011). *Applying constructivism in instructivist learning cultures*. Multicultural Education & Technology Journal, Vol. 5 Issue: 1, pp.39-54, <https://doi.org/10.1108/175049711111121919>

Prasertcharoensuk, T., Somprach, K., and Ngang, T.K., (2014). Influence of Teacher Competency Factors and Students' Life Skills on Learning Achievement. *Procedia-Social and Behavioral Sciences* 186 (2015) 566 – 572. Retrieved from <https://doi.org/10.1016/j.sbspro.2015.04.021>

Rotherham, A. J., & Willingham, D. (2009). *21st Century Skills: The Challenges Ahead*. Educational Leadership, 67(1)

Rubin et al., (2011), *Appreciative Inquiry in Occupational Therapy Education*. The British Journal of Occupational Therapy, Issue 5.

Ruhlman P.L., (2014). *A Descriptive Case Study of AI as an Approach to Strategic Planning for Special Education in a Public School*. ProQuest Dissertations Publishing.

Stavros, J.M., and Cole, M.L. (2013). SOARing Toward Positive Transformation and Change. The ABAC ODI Action Outcome, 1 (1), 10-34

Saavedra, A. R. and Opfer, V. D., 2012. *Learning 21st-Skills Require 21st-Century Teaching*. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/003172171209400203>.

Sidney, Paul F., (2015). *Evaluating a Behaviorist and Constructivist Learning Theory for 21st Century Learners*. Georgia Educational Research Association Conference. 17.
<http://digitalcommons.georgiasouthern.edu/gera/2015/2015/17>

Saavedra, A. R. and Opfer, V. D., 2012. *Learning 21st-Skills Require 21st-Century Teaching*. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/003172171209400203>

Smith, G. (2005). *Communication skills are critical for internal auditors*. Managerial Auditing Journal, 20, 513-519. doi:10.1108/02686900510598858

Subramaniam, I., (2013). *Teachers perception on their readiness in integrating soft skills in the teaching and learning*. Journal of Research & Method in Education - Volume 2, Issue 5 (Jul. –Aug. 2013), PP 19-29.

Sudheer Reddy, K., Srinagesh, C., (2013). *Fostering problem solving through innovative knowledge events*. Proceedings of the 8th International Conference on Computer Science and Education, ICCSE 2013, No. Iccse, pp. 1233e1238.
<http://dx.doi.org/10.1109/ICCSE.2013.6554108>.

Torrance, H. (2012). *Formative assessment at the crossroads: conformance, deformative and transformative assessment*. Oxford Review of Education, 38(3), 323-342. doi:10.1080/03054985.2012.689693.

The European Commission, (2013). *Education and Training Monitor 2013*. Retrieved from http://ec.europa.eu/dgs/education_culture/repository/education/library/publications/monitor13_en.pdf

Taylor, E. (2016). Investigating the perception of stakeholders on soft skills development of students: Evidence from South Africa. *Interdisciplinary Journal of e-Skills and Life Long Learning*, 12, 1-18. Retrieved from <http://www.ijello.org/Volume12/IJELLv12p001-018Taylor2494.pdf>

The Pathways Commission, (2012). *Charting a national strategy for the next generation of accountants*. Retrieved from www.pathwayscommission.org

US Department of Education, 2010

Victoria University of Wellington. (2015). *Employability skills survey 2015: Executive summary*.

Retrieved from http://www.victoria.ac.nz/st_services/careers/pdf/reports/2015-employability-skills-survey-executive-summary.pdf

Vietnam Education Law, (2005). Education Law. Retrieved from

http://www.moj.gov.vn/vbpq/en/lists/vn%20bn%20php%20lut/view_detail.aspx?itemid=5484

Wilkin, C. L. (2017). *Enhancing critical thinking: accounting students' perceptions*. Education + Training, Vol. 59 Issue: 1, pp.15-30, <https://doi.org/10.1108/ET-01-2015-0007>

Wagner, T. (2008). *The global achievement gap: Why even our best schools don't teach the new survival skills our children need — and what we can do about it*. New York, NY: Basic Books.

Xu, A., and Ye, L. (2014). *Impacts of teachers' competency on job performance in research universities with industry characteristics: Taking academic atmosphere as moderator*. Journal of Industrial Engineering and Management, Vol.7, No. 5 (2014). DOI: <http://dx.doi.org/10.3926/jiem.1261>

21st Century Knowledge and Skills in Educator Preparation, 2010